	Case 8:14-cr-00131-CAS Document 86 Filed	07/11/16 Page 1 of 37 Page ID #:1023			
1 2 3 4 5 6 7 8 9	EILEEN M. DECKER United States Attorney PATRICIA A. DONAHUE Assistant United States Attorney Chief, National Security Division ANTHONY J. LEWIS (Cal. Bar No. 23182 Assistant United States Attorney Deputy Chief, Terrorism and Export (1500 United States Courthouse 312 North Spring Street Los Angeles, California 90012 Telephone: (213) 894-1786 Facsimile: (213) 894-7613 E-mail: anthony.lewis@usdoj.go Attorneys for Plaintiff UNITED STATES OF AMERICA	Crimes Section			
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11	FOR THE CENTRAL DISTRICT OF CALIFORNIA				
12	UNITED STATES OF AMERICA,	No. SA CR 14-131(C)-CAS			
13	Plaintiff,	GOVERNMENT'S RESPONSE TO DEFENDANT			
14	v.	SU BIN'S POSITION WITH RESPECT TO SENTENCING; DECLARATIONS OF JOHN			
15	SU BIN,	KORSTIAN, NICOLAS DESIMINI, AND SPECIAL AGENT ROBERT I. KNUFF			
16 17		Sentencing Date: July 13, 2016 Sentencing Time: 2:30 p.m.			
18					
19		rica, by and through its counsel			
20	of record, the United States Attorney for the Central District of				
21	California and Assistant United States Attorney Anthony J. Lewis,				
22	hereby files the Government's Respon	hereby files the Government's Response To Defendant Su Bin's Position			
23	with Respect to Sentencing, along with	with Respect to Sentencing, along with the accompanying declarations			
24	of John Korstian, Nicolas DeSimini,	and Robert I. Knuff.			
25	The government's response is ba	ased upon the attached			
26	declarations, the government's sentencing position and response to				
27	the Pre-Sentence Investigation Report	rt ("PSR") and the attached			

28 declarations and exhibits, the files and records in this case,

1	includi	ing the PSR and the	affidavit in support of the criminal
2	complai	nt, and such furthe	r evidence and argument as the Court mag
3	permit.		
4	Dated:	July 11, 2016	Respectfully submitted,
5			EILEEN M. DECKER United States Attorney
6			
7			PATRICIA A. DONAHUE Assistant United States Attorney Chief, National Security Division
8			
9 10			/s/ ANTHONY J. LEWIS Assistant United States Attorney
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RESPONSE TO DEFENDANT'S SENTENCING POSITION

I. INTRODUCTION

Each of the sentencing enhancements recommended by the government and the PSR should be applied by the Court. They are each amply supported by the evidence set forth in the government's initial sentencing position. With those enhancements, the Guidelines yield a low-end advisory Guidelines sentence of fifty-seven months, which the government continues to recommend. That sentence is a just punishment for defendant's role in working with two military officers in hacking into U.S. companies, stealing sensitive military data that included trade secrets, and analyzing and translating the fruits of their computer intrusions.

In defendant's sentencing position ("Deft. Posn.") and his objections to the PSR (Deft. Posn. Ex. A, or "PSR Obj."), defendant recommends a sentence of thirty months, and contests the application of the sentencing factors. Each of his arguments are addressed below.

II. SENTENCING GUIDELINES FACTORS

A. Loss Amount

The analysis performed by Timothy Sestak seeks to challenge the model used by Colonel Amanda Myers to calculate the cost of developing the technical orders (and thus the loss amount under § 2B1.1), but his attempt to do so shows (1) he did not review the technical orders on which he was opining and lacks foundation, (2) he did not appear to review or rely on the final declaration and calculations by Col. Myers, or was confused by them, (3) his methodology--unlike Col. Myers's--was opaque and neither the government nor the Court can evaluate or scrutinize his conclusions,

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and (4) his arguments illustrate why Col. Myers's cost model is even more conservative, not an overestimate as both defendant and Mr. Sestak argue.

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First, Mr. Sestak stated: "I have not examined the actual documents," <u>i.e.</u>, the technical orders. (Sestak Decl. ¶ 19.) Given that Mr. Sestak spends considerable time claiming that the technical orders are not complicated, his lack of foundation undermines his conclusions and shows they are unsupported. Mr. Sestak, who has never worked on the C-17, speculates from his experience on commercial aircraft that technology is simply borrowed and technical orders "cut-and-pasted" from one military aircraft to the next. (<u>Id.</u> ¶¶ 7-8.) His speculation offers no basis to undermine the calculations prepared by Col. Myers, who is the System Program Director with broad responsibility over the C-17, including its capabilities, operations, and finances, particularly where her cost estimate is grounded on concrete numbers that appear in the actual contracts and estimates used for sustaining the C-17. (Myers. Decl. ¶¶ 5-6, 10-11, 22.)

Mr. Sestak also suggests, without having seen the technical 19 orders, that information about C-17 systems "can easily be found on 20 21 the internet." (Sestak Decl. ¶ 16.) That statement is not true if 22 it is meant to apply to the technical orders here or to all of the 23 information in them. The technical orders are caveated with a 24 Department of Defense distribution statement that prevents their public disclosure. (Knuff Supp. Decl. ¶¶ 9-10.) One of the 25 technical orders, the file titled 1C-17A-1-2, has been determined to 26 27 be export-controlled and to contain technical data on the United States Munitions List ("USML") subject to the International Traffic 28

in Arms Regulations and the Arms Export Control Act that cannot be exported without a license. (Knuff Supp. Decl. ¶¶ 9-10.) It therefore cannot be publicly posted on the Internet.

Second, Mr. Sestak makes repeated references to an hourly rate of \$250, and to designations of the technical orders as simple, moderate, or complex. (Id. ¶ 22.) These designations did not appear in Col. Myers's declaration or her cost model. Rather, they only appeared in materials provided in discovery while the final cost model was being developed and three different models were being prepared and evaluated.¹ (See id. ¶ 21.) Mr. Sestak's reference to \$250 per hour of engineering labor is misplaced, because that was used in one of the three models that was not used by Col. Myers; Col. Myers used the lower figure of \$200 per engineering hour. (Myers. Decl. ¶ 11.) Finally, defendant claims that the rate of \$200 per hour is not specific. (PSR Obj. 5). Col. Myers, however, stated that the additional expenses are "routinely" charged, but they would not be accounted for without using the conservative estimate of \$200 per hour, and defendant offers no basis to question that fact.

Third, Mr. Sestak purports to revise Col. Myers's calculations, but he provides little guide as to how he did so. His references to "gradations," a "time-based, program maturity reduction in costs," "[a]djusting the sale of the costs to better match the scale of the complexity," the "values previously derived in this document," and a "program maturity" adjustment that applied in some unspecified way

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¹ The alternative cost model that differentiated the hourly rate by complexity level was not used by the government in its sentencing position; because its values were used by the defense, the government notes that model yielded a loss amount of over \$3 million. The government recommends the Court use the cost model submitted by Col. Myers.

somehow generated the figures in Table 1 totaling \$742,177.50. (Sestak Decl. ¶¶ 26-28.) Without the ability to check or fully understand his calculations, his ultimate conclusion cannot be credited, certainly not over Col. Myers's.

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5 Fourth, defendant and Mr. Sestak argue that the most labor-6 intensive work to create the technical orders would have been done 7 earlier in the life cycle of the C-17. (PSR Obj. at 5; Sestak Decl. 8 ¶¶ 6, 26, 28.) If this argument were credited, however, it would 9 simply show that Col. Myers's estimate was even more conservative because it did not account for the more cost-intensive engineering 10 11 labor when the technical problems were first being solved and the 12 engineering staff faced steeper learning curves. Mr. Sestak explains that he believes "the costs of all documents are gradually reduced 13 14 over time in these large programs" like the C-17 because of "the 15 general improvement in learning curve by all personnel as a program 16 matures," and that therefore Col. Myers's calculations are "greatly inflate[d]." (Sestak Decl. ¶ 26.) Col. Myers, however, used an 17 hourly rate based on "the operative contract in 2010" with Boeing. 18 19 (Myers Decl. ¶ 11.) Therefore, following Mr. Sestak's reasoning, the cost model submitted by Col. Myers used the average number of hours 20 21 needed to complete one page of a technical order (and the average 22 hourly rate) by personnel who were already familiar with the 23 technology later in the C-17 program. In other words, Col. Myers's 24 cost model does not even account for the "most labor-intensive work [that] would have been done on these Technical Orders," showing why 25 26 it was a conservative cost model, not an over-estimate as defendant 27 claims. (PSR Obj. ¶ 6.) Col. Myers's calculations were based 28 Boeing's engineering labor rates for the C-17 in 2010, and her cost

model yielded a reasonable estimate of the cost to create the seven technical orders.

Defendant claims that the government offers no reason why it used the values from 2016 (PSR Obj. 5), but Col. Myers declaration clearly states that the cost model's calculations could not be completed precisely the same way for 2010 because the number of pages of technical orders that were text versus illustration was no longer known, and the model ascribed a different cost for producing a page that was text versus a page that contained an illustration. (Myers Decl. ¶ 25.) Even using the lowest possible value for 2010 (i.e., if all the pages were text), which were calculated by Col. Myers, the cost model still yields \$1,527,200--more than the \$1.5 million threshold for a sixteen-level enhancement. (Id. ¶¶ 27-28.)

Defendant also claims that this loss amount cannot be used because defendant did not intend for the loss amount to be this high. (PSR Obj. 3.) Defendant cites United States v. Yihao Pu, 814 F.3d 818, 826 (7th Cir. 2016) for the proposition that defendant must have intended to cause the loss amount associated with developing the technology. (PSR Obj. 3.) Yihao Pu, however, is inapplicable, because in that case "the parties agreed that there was no actual loss," but "disputed the intended loss amount," so the court naturally relied on evidence as to the amount of loss defendant intended. Other cases have used the cost of development, irrespective of defendant's intent to cause that amount. United States v. Four Pillars Enter. Co., No. 06-3297, 253 Fed. Appx. 502, 2007 WL 3244034, at *1, *8-9 (6th Cir. 2007) (unpublished decision) (affirming district court's use of victim witness's description of 28 research and development costs associated with adhesive formula);

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United States v. Ameri, 412 F.3d 893, 900-01 (8th Cir. 2005) (affirming trial court's loss amount of \$1.4 million, where employee stole his employer's two copies of proprietary software whose development cost was \$700,000, where software was at the heart of a \$10 million contract, had no verifiable fair market value because it was not available separately, and alternatively had a fair market value of \$1 million per copy). There is no authority for limiting the loss amount--particularly where the Guidelines provide for using the cost of developing technology--to only that which defendant intended.

Although defendant now claims that his valuation estimates for C-17 files were based only on lists of files or topics without the contents of those files (PSR Obj. 3), that claim is contradicted by the evidence in the case, namely the document that he drafted and sent to UC1 with those values, and with the many documents he received, translated, and analyzed. For example, defendant necessarily saw and then shopped some of the stolen files to experts in order to tell UC1 that the files were unique and had never been seen before. (Ex. 14 at 140.) While some work remained to be done in collecting additional files according to defendant's direction, defendant was not looking only at a mere shopping list or "meaningless" lists with no substance, he had seen and analyzed some of the raw materials that were stolen.

Defendant points to the fact that some types of documents that defendant said had value did not appear in the two-page list that followed in that same document on February 2, 2010. (PSR Obj. at 8-9; Ex. 14.) Defendant's conclusion, however, was reached after he had received multiple e-mails with multiple directory file listings

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in the previous month, and was based on his review of many files and directory file listings by that time. (Knuff Supp. Decl. \P 4.) To take defendant's example, while there are no items listed in Exhibit 14 that explicitly referred to "testing," UCl had sent defendant an e-mail on January 21, 2010 attaching four directory listings inside an archive titled C-17_2; one of them contained at least ten filenames with references to "testing" and another contained at least twenty-nine filenames with references to "testing." (Knuff Supp Decl. $\P\P$ 5.a-b.) Furthermore, in the 1,467-page directory file listing that defendant sent to UCl with highlighting, nineteen files were highlighted with the word "testing," showing that defendant was specifically directing UCl to take documents related to testing from materials he had already received. (Id. \P 6.)

Ultimately, even if one or more of defendant's or Mr. Sestak's arguments were credited, a loss amount of \$1,875,020 using the complete 2016 figures, or \$1,527,200 using 2010 figures, is conservative, where they are based on only 7 technical orders. Seven technical orders represent a tiny fraction of the 85,000 files UC1 claimed they stole related to the C-17 (Ex. 3 at 56) and did not include the files defendant highlighted for UC1 to steal (CR 1 at 28). Further, the C-17 was only one of the aircraft and technologies stolen by defendant with UC1 and UC2.

Defendant's own estimate of the value and the operating costs of his co-conspirators corroborate this calculation of the loss amount and offer alternative measurements that reach similar loss amounts, as described in the government's sentencing position. Although defendant claims the activities of the front companies and their operations do not tie to defendant's participation in the offense

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(PSR Obj. at 10), as noted in the government's sentencing position, multiple projects referenced in their reports were projects that defendant personally assisted in compromising or evaluating. (CR 75 at 5-6.)

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B. Defendant Stole Trade Secrets for a Foreign Government, Foreign Instrumentality, and Foreign Agents

Defendant argues that this enhancement must be proven by reasonable certainty, rather than by a preponderance of the evidence. Defendant's argument illustrates why there are two separate bases on which this enhancement applies, and the government has met the standard under each. Because defendant <u>completed</u> the acts sufficing to prove the theft of trade secrets knowingly benefiting foreign government, instrumentality, and agents, a preponderance of the evidence suffices, and the evidence easily meets that standard. In instances where offense characteristics are <u>based only on the intent</u> of the conspirators, rather than on completed acts, a reasonable certainty is called for. Here, the evidence also shows by a reasonable certainty that defendant intended to steal trade secrets for those same beneficiaries.

Section 2X1.1(a) provides that the base offense level for a conspiracy is that for the substantive offense, "plus any adjustments from such guideline for any <u>intended offense conduct</u> that can be established with <u>reasonable certainty</u>." (emphasis added.) <u>United</u> <u>States v. Nadirashvili</u>, 655 F.3d 114, 122 (2d Cir. 2011), cited by the defense, required the use of a reasonable certainty standard, because the enhancement applied only to intended conduct, rather than completed conduct. (PSR Obj. 13); U.S.S.G. § 2X1.1 App. Note 2 (calling for application of reasonable certainty standard when an

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arrest for a conspiracy occurred "during the conspiratorial stage of planning" "because such factors would be speculative" except where a reasonable certainty "established that the defendants actually intended to physically restrain the teller"). Conversely, in <u>United States v. Cabrera</u>, 288 F.3d 163, 169-70 (5th Cir. 2002), the Fifth Circuit observed exactly this distinction: "We conclude that the government is correct that subsection 2X1.1(a)'s reasonable-certainty standard is specific to findings of intended conduct," rather than conduct that actually did occur, for which a preponderance of the evidence standard applies.

Here, defendant has already admitted to exchanging e-mails showing that C-17 files had been stolen, that the Project A materials had been stolen, and that the F-22 and F-35 documents discussed below had been stolen, which facts are also detailed in the PSR. (Plea Agrt. II 12.k.8-14; PSR II 42-55.) He also intended to steal what were trade secrets. (CR 75 11-13.) Under either standard, the evidence supports the four-level enhancement.

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1. Defendant Stole Trade Secrets

After the PSR was disclosed on June 6, 2016 (CR 69), on July 6, 2016 defendant objected to its conclusion that what he stole were trade secrets because--he claims--they did not have value by virtue of their being secret. As set forth below, and in the government's sentencing position (CR 73, 75), defendant sought trade secrets as an object of his conspiracy with UC1 and UC2, and defendant and UC1 stole what in fact were trade secrets.

The factual elements of a trade secret are: "(1) that the information is actually secret because it is neither known to, nor readily ascertainable by, the public; (2) that the owner took

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reasonable measures to maintain that secrecy; and (3) that independent economic value derived from that secrecy." <u>United States</u> v. Chung, 659 F.3d 815, 825 (9th Cir. 2011).

Trade secrets can take many forms, can relate to different types of technology or internal processes, and can relate to various stages of the development, production, or competitive aspects of that technology or of business operations. <u>E.g.</u>, <u>United States v. Lange</u>, 312 F.3d 263, 266 (7th Cir. 2002) (CAD drawings of airplane brake assemblies); <u>Chung</u>, 659 F.3d at 825 (documents related to a rocket and to a phased array antenna for the space shuttle); <u>United States</u> <u>v. Krumrei</u>, 258 F.3d 535, 536 (6th Cir. 2001) (information related to process for applying coatings); <u>United States v. Hsu</u>, 155 F.3d 189, 195-96 (3d Cir. 1998) (processes, methods, and formulas for manufacturing an anti-cancer drug).

15 Last week the Ninth Circuit re-affirmed that the types of 16 information that can constitute trade secrets are broad, and that they include "financial and business information" or customer lists, 17 18 and that a trade secret "may consist of a compilation of data, public sources or a combination of proprietary and public sources." United 19 States v. Nosal, F.3d , Nos. 14-10037 & 14-10275, slip op. at 20 32-35 (9th Cir. July 5, 2016). Even if defendant's claim that some 21 portion of the information contained in the materials defendant stole 22 23 were in the public domain (PSR Obj. 3) -- a claim that is not supported 24 by any evidence submitted by defendant--Nosal plainly states that 25 trade secrets can be an "amalgam of public and proprietary source data." Id. at 34. 26

27 The government is now submitting two declarations that establish 28 that two of the files defendant stole with UC1 were trade secrets,

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which evidence is in addition to defendant's explanation to his coconspirators of the value, to his seeking and translating proprietary information, and to his description to his co-conspirators of the importance of design-phase information detailed in the government's sentencing position (CR 75 at 11-13; <u>e.g.</u>, Ex. 14 at 140). The testimony of John Korstian and Nicolas DeSimini was previously proffered in extradition submissions, which were produced in discovery and underlie the PSR's conclusions in paragraphs 50 and 55, and is now submitted in declarations to the Court.

10 Mr. Korstian's declaration refers to the F-35 Flight Test Plan, 11 which was incorporated into the document that defendant translated 12 into Chinese and e-mailed to UC1 on May 3, 2012, the first page of 13 which appears on page 47 of the complaint affidavit. (CR 1 at 45-14 47.) The F-35 Flight Test Plan was used to outline how the F-35 15 would be tested as it was developed, including: how many airplanes 16 would be built and used; how certain components would be tested, how they could be configured, and using what instrumentation; and the 17 18 techniques used to test the performance, capabilities, and limits of 19 various features of the F-35. (Korstian Decl. \P 5.) His declaration 20 describes how the F-35 Flight Test Plan included various parameters 21 used in flight tests for the F-35, how those details are not publicly 22 available, and the measures used to protect that information, 23 including physical and electronic access and agreements with employees and partner defense contractors. (Id. $\P\P 4-5.$)² 24

^{26 &}lt;sup>2</sup> As noted in the complaint affidavit, exactly which company's computer systems were compromised is not known for every file that was stolen, in particular where numerous companies worked jointly on projects and where prime contractors sub-contracted portions of the projects to other companies. (CR 1 at 18.)

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Mr. Korstian explained that the details reflected in the F-35 Flight Test Plan were valuable because they were not public, including the details listed above, in part because the decisions regarding the details included in it were the result of the judgment and expertise of engineers at Lockheed Martin Aeronautics Company ("LM Aero"). (Id. $\P\P$ 5, 5.a.) Those details include: how many flights, flight hours, ground test hours would be used; the timeline for executing the flight test plan; the number of sites used to perform the testing; the process for how data was transmitted, stored, and processed; and the list of all of the tests of various components that would be performed. (Id. \P 5.b.) Those details all require decisions about cost, timing, staffing, validation processes, and resources, which are all elements used when competing for government contracts. (Id. 5.c.)

15 The F-35 Flight Test Plan also reflected how LM Aero and its 16 partners approached the overall design of a testing plan, and the way in which the F-35 Flight Test Plan sought to carry out its flight 17 testing plan is not public. (Id. ¶ 5.d.) Aside from the individual 18 19 numerical values or design parameters, the fundamental approaches to 20 design and problem-solving can constitute trade secrets--and are 21 precisely the type of information that a defense contractor can 22 "derive[] some economic value from keeping . . . secret" because they can have an "implication for everything else [a defense contractor] 23 24 is working on" and "show a competitor how [a defense contractor] operates." Chung, 659 F.3d at 827 ("A reasonable inference is that 25 26 the information could assist a competitor in understanding how Boeing 27 accomplishes its work, including engineering and processing, and would reveal Boeing's relative costs for performing each type of 28

work. A reasonable inference is that the information could assist a competitor in understanding how Boeing approaches problem-solving.").

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Mr. Korstian also explained that proprietary information agreements were in place that protected proprietary information whenever it was shared with partner defense contractors. (Korstian Decl. \P 4). That measure has been relied upon by the Ninth Circuit to reinforce findings that a trade secret has been afforded appropriate, reasonable protection measures. <u>Nosal</u>, slip op. at 36 (ruling that sharing of trade secret with third parties did not undermine trade-secret status because when it was shared, "it was provided on an understanding of confidentiality").

There is no doubt that this document, one that required nearly 60,000 hours of time by skilled employees at a sophisticated defense contractor to help create one of the world's most advanced fighter jets, is a trade secret. (Korstian Decl. ¶ 3.)

16 Mr. DeSimini's declaration refers to the presentation for the F-22 AVEL that UC1 took pictures of and sent to defendant on April 4, 17 18 2010. (CR 1 at 41-43.) The AVEL is the AMRAAM Vertical Eject 19 Launcher, and an AMRAAM is the Advanced Medium Range Air-to-Air 20 Missile on the F-22; it is used to eject missiles from within the plane, rather than carrying weapons externally, which allows the F-22 21 22 to be more stealthy. (DeSimini Decl. ¶ 3.) His declaration 23 describes how the training presentation incorporated details about 24 the engineering used to develop and produce the AVEL, how those details are not publicly available, and the measures used to protect 25 26 that information, including physical and electronic access and legal 27 agreements. (Id. ¶¶ 5-6.) He furthermore explained that the details in the presentation (including diagrams, renderings, annotations, 28

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photographs, schematics, quantitative metrics, instructions, and descriptions of certain functions) are valuable because they are not public, specifically because they would allow competitors to reverseengineer much of the engineering work that went into creating it. (Id. ¶¶ 7, 7.a-b).

While any one trade secret that was in fact stolen, established by a preponderance of the evidence, suffices to apply the enhancement, these two declarations show that defendant stole at least two different trade secrets that related to two different companies.

The government previously set forth all the facts showing not 12 only that defendant successfully obtained, but that he was 13 specifically seeking trade secrets, in pages 11-13 of the 14 government's sentencing position, which are not repeated here. (See 15 CR 73 11-13). In light of Nosal, it should be emphasized that 16 defendant used his own words to describe the competitive advantages that the attributes of one aircraft have over others (Ex. 14 at 140), that he was trained himself in aviation and aerospace (Plea Agrt. ¶ 18 19 12.a), and that he confirmed no one in the industry had seen 20 documents they stole and that their unique nature made them valuable (Ex. 14 at 140; Ex. 10 at 91 (referring to the materials "fondly 21 22 dreamed of" and their "first time having contact with secret data related to the US military's" Project A), which are examples of the 23 24 evidence that shows with more than reasonable certainty that 25 defendant was specifically seeking trade secrets. Nosal, slip op. at 26 37 (relying on defendant's status as a former executive to show he was "familiar with the competitive advantage" conferred by the 27 customer list trade secrets). 28

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2. Defendant Knew and Intended the Trade Secrets Would Benefit 2PLA, QTC, and Military Officers UC1 and UC2

Defendant's attempts to dodge or ignore his explicit references to 2PLA and QTC, that two military officers were his co-conspirators, and the military nature of the subject matter of the conspiracy that defendant described in his own words, are each unpersuasive.

First, defendant suggests there are only two versions of the Project A report, but defendant e-mailed three different versions of that report. (PSR Obj. 16-17.) The second one--that the metadata shows defendant last modified--was the first to refer to 2PLA and QTC,³ but those references stayed in the third and longest report that defendant sent (and which defendant also edited). (Knuff Init. Decl. $\P\P$ 5.g.i-iii, 5.h; Knuff Supp. Decl. \P 3.) The metadata included in Exhibit 10 is that of the third and longest report defendant prepared. (Id.)

Second, the metadata shows defendant is the one who edited the document. (Ex. 10 at 103.) Defendant's response to the PSR suggests that defendant only "open[ed]" the document rather than "edited" it, but defendant already admitted in the plea agreement that he "edited" it. (Plea Agrt. ¶ 12.k.11.)

Third, moreover, the metadata that defendant points to--the "Total editing time"--does not show that defendant only spent one

²³ Defendant tries to distinguish the formal name of QTC in the government's sentencing position from what claims he was referring 24 to, "Qingan Group Co., Ltd." (PSR Obj. 16.) The distinction is immaterial, because defendant refers to it as "your department," 25 referring to 2PLA, showing that defendant knew it was subordinate to the Chinese military. (Ex. 10 at 91.) Similarly, while defendant 26 notes that the document was signed on behalf of a different entity, it is immaterial if defendant was ghostwriting it or not. (PSR Obj. 27 17.) The evidence shows that defendant was the person writing and revising the document. 28

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second editing it, rather it more likely shows defendant took the step of saving each version as a new document. Furthermore, this "Total editing time" field resets when a document is saved as a new document (the "Save As" function in Microsoft Word that allows a user to save the document as a new file with a new filename), and each of the versions of the report that defendant e-mailed had a new filename. (Knuff. Supp. Decl. ¶¶ 2-3.)

8 Fourth, the very subject matter and language defendant used show that he knew this information was not merely for a commercial enterprise. (E.g., Ex. 10 at 91 (noting the information "showed us 10 perfectly the US military's navy, air force, and army's complete coordinated combat thinking"); id. at 94 (explaining that this "set 12 13 of materials is the highest-level classification we have seen of all the US military materials, and it is extremely valuable"); id. at 102 15 (noting the stolen information "has extremely vital significance in 16 our country's speeding up the development" of Project A).) Defendant knew more was at stake than his own technical curiosity, and knew-from the subject matter alone, let alone the explicit references to 2PLA and QTC--that something other than private aviation industry was 19 involved. (Deft. Posn. 16.) 20

21 Ultimately, the fact that defendant edited the reports, that 22 they were about Project A, that defendant used explicit language 23 about their military nature, that he sent them to his two co-24 conspirators who were military officers, and that defendant -- in his editing--first included the references to 2PLA and QTC and then 25 preserved them in the final version he e-mailed shows that defendant 26 27 knew he was stealing data for the Chinese military and its agents and 28 instrumentalities.

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C. Defendant's Role Was Essential to the Scheme, Not Minor As summarized in the government's sentencing position, defendant told UC1 and UC2 whom to target, which files to steal, why they were important, and then translated and analyzed what they stole. These facts show that defendant understood the scope and structure of the criminal activity, and that he participated in planning for the activity and exercised decision-making authority by figuring out whom to target and then selecting which files he instructed UC1 to steal. U.S.S.G. § 3B1.2 App. Note 3(C)(i)-(iii). His participation also involved reviewing both lists of files to determine which should be stolen, and reviewing the contents of files to determine their significance, tasks which the evidence shows were left to defendant alone. Id. § 3B1.2 App. Note 3(C) (iv). And while defendant claimed he did not in fact receive financial proceeds from the scheme, he has admitted and maintains that he entered into the scheme for purposes of commercial advantage and for profit. Id. § 3B1.2 App. Note 3(C) (v); (Plea Agrt. ¶¶ 12.h).

Defendant was trusted with the most sensitive details of the scheme. UC1 sent him both the raw lists of files to which he had gained access inside companies in the United States in order to seek defendant's direction in choosing which to steal, and UC1 sent defendant original files that UC1 had stolen for defendant to evaluate. <u>E.g.</u>, Plea Agrt. ¶ 12.k(3), (9)-(10), PSR ¶ 50; CR 1 at 37-43.

Defendant claims that UC1 and UC2 could have carried out the offense without him. (Deft. Posn. 17). The fact that others could have carried out the offense if defendant had not chosen to join the conspiracy and participate in it is not a basis to award a downward

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adjustment, but more importantly that claim is not supported. UC1 was able to hack into a given target while defendant may not have been; but UC1 relied on defendant to identify whom to target, he relied on defendant to select which files to steal, and he relied on defendant to determine the significance of what they stole. In essence, UC1 treated defendant as the subject matter expert that he was. For example, narrowing a list nearly 1,500-pages long down to 146 documents or folders for UC1 to steal allowed the conspiracy to operate effectively, without spending UC1's time downloading and examining files that were not needed, or gaining access to companies whose technology was not needed. (Knuff Supp. Decl. ¶ 6.)

Defendant tries to brush aside the 146 e-mails that he exchanged with UC1 and UC2, suggesting that they largely involved directory file listings (lists of files and folders) and were lost in the flow of other e-mails he received. (PSR Obj. 12.) These e-mails, however, reflect considerable time and effort on defendant's part. Defendant spent the time to review a 1,467-page list of files and folders and highlighted 146 of them (Knuff. Supp. Decl. \P 6); he spent the time to translate a technical flight test plan in English into Chinese (Knuff Supp. Decl. \P 7; Korstian Decl. \P 7); he edited multiple versions of a report discussing the significance of Project A (Knuff Init. Decl. \P 5.g-h.); and he took the time to show stolen C-17 files to experts in China (Ex. 14 at 140). Inasmuch as defendant may not have been able to hack into U.S. companies himself, UC1 would not have known whom to target, what to steal, or how to explain its significance to anyone without defendant.

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1 Defendant has made no showing that satisfies his burden of proving he was entitled to a minor role. United States v. Rodriguez-Castro, 641 F.3d 1189, 1193 (9th Cir. 2011).

III. DEFENDANT IS NOT ENTITLED TO A VARIANCE NOR TO A SENTENCE OF THIRTY MONTHS

Defendant advances a number of arguments in support of his request for a variance and in support of his contention that a sentence of thirty months is appropriate. Those arguments do not account for the significance of the information defendant stole with UC1 and UC2, the range of different projects defendant assisted in targeting, stealing, and analyzing, and the fact that the information at issue relates to military weapons systems used in national defense.

Defendant points to other "fraud" cases that have resulted in similar but slightly lower sentences. (Deft. Posn. 20, 23.) Defendant stole export-controlled military technology that also included trade secrets relating to the design of multiple military aircraft and other technologies, and his attempt to sweep it into the mean or median sentences for generic "fraud" cases is unpersuasive. (Id.) While defendant's conviction shares a common Guideline with other fraud offenses, defendant stole trade secrets and sensitive data on the USML from military aircraft and technologies, and those facts set this case far apart from average fraud sentence. Similarly, while willfully exporting any defense item on the USML is a serious crime, defendant's attempt to compare a single judgment in another district involving multiple rifle scopes is not an apt comparison of the design materials used to make military airlifts,

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fighter jets, or Project A, all of which are of strategic significance. (Id. at 3, 20, 24.)⁴

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Defendant and his spouse own a home in Canada, at least two apartments in Beijing, an apartment in Shanghai, and an apartment in Guangzhou. (PSR ¶¶ 132.b-d.) These values do not account for whatever the balances are in defendant's savings accounts in China and Canada, which are not included in the PSR. (PSR ¶ 132.a.) Defendant has the ability to pay a fine of \$100,000, which is far less than the loss amount discussed above.

Defendant points to his family, friends, and employees who have submitted letters about their view of his redeeming qualities, which are appropriate for the Court to consider as a part of defendant's history and characteristics. (Deft. Posn. 3-15.) These facts are more than accounted for in the low-end sentencing recommendation, given the aggravating factors that take this case out of the category of a typical "fraud" case that would be governed by the same Guideline. More relevant to his offense conduct, however, is that defendant did business with U.S. companies and traveled in and out of the United States for years, while he channeled sensitive technologies of other aviation and defense companies to military officers and front companies in China.

Defendant claims that his wife will be relying on him and drawing down their savings until he is released from prison. (Deft. Posn. 25.) The Guidelines provide that "family ties and responsibilities are not ordinarily relevant in determining whether a

⁴ Defendant refers to national statistics on offenses under § 27 2M5.1, but § 2M5.2 applies here, and the figures in the document defendant cite show that a larger fraction of the cases resulted in a 28 within-guidelines sentence. (Deft. Posn. 23 n.3.)

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departure may be warranted." U.S.S.G. § 5H1.6. While defendant points to his age as a reason why he will not recidivate, that conclusion--even if statistically true--is hard to evaluate when he states he will be returning to China with his family. (Deft. Posn. 26.)

Defendant also notes that he decided to waive extradition, plead guilty, and therefore avoided additional litigation in Canada and the United States. (Deft. Posn. 3, 27.) In evaluating defendant's request for a variance or to a sentence of thirty months on this basis, the Court should also consider that the government agreed not to proceed on additional charges of violations of the Arms Export Control Act, theft of trade secrets, or additional violations of unauthorized computer intrusions, all of which had been charged. (Plea Agrt. ¶ 3.d.) Defendant's conduct alone shows that he is not entitled to a variance based on his acceptance of responsibility, which is already accounted for in the Guidelines range. U.S.S.G. § 3E1.1; (Plea Agrt. ¶ 3.e).

While defendant repeats that he did not earn any money as a result of the scheme (Deft. Mot. at 2, 16), he admitted both that he engaged in the six-year conspiracy for purposes of commercial gain and sought to profit from the data he and UC1 stole. (Plea Agrt. ¶ 12.h.) Given he ascribed specific monetary values to categories of data he identified for UC1, even if he were unsuccessful in profiting from the stolen data, he was successful in stealing it and lauding its significance.

IV. CONCLUSION

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For the foregoing reasons, the government respectfully submits that an appropriate sentence for defendant is fifty-seven months'

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imprisonment, one year of supervised release with the terms recommended by the USPO, a fine of \$100,000, and a \$100 mandatory special assessment.

DECLARATION OF JOHN KORSTIAN

I, John Korstian, declare as follows:

1. I was previously employed as an Aeronautical Engineer – Principal for Lockheed Martin Aeronautics Company ("LM Aero" or Lockheed Martin), a position I held for approximately six years, until 30 April 2015, when I retired. I have previously held management positions at LM Aero, and before that I worked and held management positions at General Dynamics, until its military aircraft division was purchased by the Lockheed Corporation in 1992, which is when I began working for LM Aero.

2. One of my responsibilities while I was an Aeronautical Engineer - Principal was to work on the design of the F-35. The F-35 "Lightning II" (or Joint Strike Fighter) is a fifth-generation fighter jet aircraft with supersonic capabilities that is also equipped with "stealth" capabilities that allows it to evade radar. The F-35 was developed over multiple years by multiple companies performing contracts with the United States Department of Defense in the United States and other countries at a total cost of billions of dollars. Lockheed Martin is the prime contractor on the F-35, but teams or subcontracts with other defense contractors for certain parts of the F-35.

3. During the course of my work at LM Aero, I authored and was responsible for creating and developing a document that was the flight test plan for the F-35 fighter jet (the "F-35 Flight Test Plan"). That document was chapter 10 from a larger System Test Plan for the F-35 that was finalized in August 2001. The F-35 Flight Test Plan was completed while the F-35 was still being designed. Approximately 59,959 man hours were required to create the F-35 Flight Test Plan.

4. From my work at LM Aero, I know that F-35 flight test information is not publicly available. It was also protected with LM

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Aero by means of restricting electronic access to F-35 technical data through users' credentials, by means of restricting physical access to LM Aero's physical facilities where such information was stored or accessible, and through legal agreements with all LM Aero employees who were authorized to access F-35 data that they keep such information confidential. LM Aero also had (and has) in place proprietary information agreements with its partner defense contractors on F-35 that protect proprietary information and limits its use and dissemination.

5. Lockheed Martin and its partner F-35 defense contractors used a specific approach to the design, testing, and development of the F-35, which included various parameters and details that were proprietary, such as: the number of airplanes that would be built and used for testing; the scope of the testing for various components of the F-35; the instrumentation that would be used to test and operate the F-35; the avionics configuration; and the techniques used to test the performance, capabilities, and limits of various features of the F-35. This information was contained in the F-35 Flight Test Plan and is not publicly available.

6. I also know--as a former engineer, principal, and manager at LM Aero -- that the information contained in the F-35 Flight Test Plan includes information that is valuable because it is not public.

a. Deciding how many planes to build, which instrumentation to use, how to scope the testing of different components, and exactly which techniques would be used to test the aircraft and its components are the product of the judgment and expertise of engineers at LM Aero.

b. The F-35 Flight Test Plan includes the number of aircraft, how many test flights would occur, how many flight hours would be involved, and how many ground test hours would be involved.

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It also includes a schedule showing how long each phase of the flight testing will last, the number of sites that will be used to test the F-35, the process for seeking and obtaining flight clearance approvals in order to conduct flight tests, the process for how data is transmitted, stored, and processed from the testing, and the list of all of the tests of various components that would be performed.

7 Each of these details involve decisions regarding cost, C. 8 timing, staffing, validation processes, and resources. These elements 9 are evaluated or accounted for when the government selects which company will be awarded government contracts, and the decisions made and the parameters used--that are reflected in the F-35 Flight Test Plan--rely on LM Aero and its partners' experience and designing and producing fighter jets.

14 d. The F-35 Flight Test Document also reflects how it is 15 that LM Aero and its partners approach the overall design of a testing plan. Although every project has its own individual requirements, the 16 17 approach outlined in anticipating how this or other flight test plans would be accomplished by LM Aero and its partners is not public. 18

I have also reviewed a document shown to me by Special 19 7. Agents of the FBI (the "Chinese Flight Test Plan") that appeared to 20 21 contain the same text in English as the F-35 Flight Test Plan, but which contained numerous differences from the F-35 Flight Test Plan. 22 For example, multiple images were included in the Chinese Flight Test 23 Plan that did not appear in the F-35 Flight Test Plan. I recognized 24 two such images related to a "catbird," or "Cooperative Avionics 25 Testbed," that was a modified Boeing 737 aircraft used to test F-35 26 27 avionics in flight; neither the aircraft nor those images existed in August 2001 when the F-35 Flight Test Plan had been finalized. There 28 were also differences in the cover page on the two documents. Although each document stated it was the proprietary information of

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Lockheed Martin and its partner defense contractors, the Chinese Flight Test Plan contained an export certification number on the cover page that was different from the export certification number on the original document. Also, the team logo on the Chinese Flight Test Plan was different from the logo in use by the program at the time the original document was developed. There were several other formatting changes between the two documents.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct and that this declaration is executed in <u>FORT WORTH</u>,

TEXAS , on July 8, 2016.

KONSTAN

DECLARATION OF NICOLAS DESIMINI

I, Nicolas DeSimini, declare as follows:

 I am currently a Senior Systems Engineer at Harris Corporation. Harris acquired the company Exelis Inc., which was spun out of ITT Corporation, which had in turn had acquired the company EDO Corporation, where I began working forty-six years ago.

2. The F-22 "Raptor" is a fifth-generation fighter jet aircraft with supersonic and supercruise capabilities that is also equipped with "stealth" capabilities that allows it to evade radar. The F-22 was developed over multiple years by defense contractors in the United States at a total cost of billions of dollars.

3. Beginning in 2002, I was the technical lead for the AVEL program for EDO. The AVEL is the <u>AMRAAM Vertical Eject Launcher</u>, and an AMRAAM is the <u>Advanced Medium Range Air-to-Air Missile</u> on the F-22. One of the features that permits the F-22 to be a very stealthy aircraft is that it carries its weapons payload internally rather than on its wings. The AVEL was essentially a release mechanism for AMRAAM missiles used on the F-22 airplane.

4. In the course of my duties as the AVEL technical lead, I authored a presentation titled "F-22 AMRAAM Vertical Eject Launcher (AVEL) LAU-142/A Informal Training for Flight Maintenance and Servicing" (the "EDO AVEL Presentation") between 2002 and March 2004, while the aircraft was prototyped and tested and an initial, limited production had been delivered to certain Air Force Bases for testing. That document was over 140 pages long. I prepared the EDO AVEL Presentation with my team of four to five other people for use at an informal training in March 2004.

I developed the content of the EDO AVEL Presentation, 1 5. including the images, figures, diagrams, schematics, and the technical specifications and parameters. In order to create the presentation, I incorporated much of the engineering and technical details that were used to develop and produce the AVEL. I also routed the document through various personnel at EDO who attached the markings that appear on the presentation, including specifically the labels indicating it was "EDO Proprietary Information," "Source Selection Sensitive," and "This Data is Covered by IATR [sic] 22 CFR 120-130," or alternative phrasings of those warnings.

The engineering and technical details used to develop and 6. produce the AVEL that were included in the EDO AVEL Presentation are not publicly available. F-22 AVEL technical information in general is not publicly available. It is protected by means of restricting electronic access to F-22 AVEL technical data, by means of restricting physical access to Harris or its predecessors' physical facilities where such information was stored or accessible, and through legal requirements placed on all employees who were authorized to access F-22 data that they keep such information confidential--I, like other employees of EDO and its successors, signed a non-disclosure agreement.

7. From my work as an engineer, I know that the engineering details contained in the EDO AVEL Presentation are valuable because they are not publicly available.

The details in the EDO AVEL Presentation included: a. detailed, annotated, three-dimensional renderings; photographs of the AVEL and of its components; a cross-section diagram; mechanical design schematics, hydraulic/pneumatic schematics, electrical

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schematics, and other annotated schematics; descriptions of the functions of different parts of the AVEL; certain quantitative metrics of the performance and tolerance of components of the AVEL; and instructions for the installation and removal of the AVEL.

The details included in the EDO AVEL Presentation are b. the result of the engineering that was used to create this advanced component in a state-of-the art fighter jet. Through an examination of the illustrations and written descriptions, a person would be able to reverse-engineer much of the work that went into creating the AVEL in the first place.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct and that this declaration is executed in North Amityville, New York on July 11, 2016.

NICOLAS DESIMINI

DECLARATION OF SA ROBERT I. KNUFF

I, Robert I. Knuff, declare as follows:

1. I am a Special Agent ("SA") with the Federal Bureau of Investigation ("FBI"), and I make this supplemental declaration in support of the government's sentencing position in <u>United States v.</u> <u>Su Bin</u>, No. SA CR 14-131(C)-CAS. This declaration supplements the declaration to which I swore on June 16, 2016 (my "Initial Declaration").

2. In my Initial Declaration, I referred to reports about Project A that defendant e-mailed to UC1 and/or UC2 in paragraphs 5.g-h. There were a total of three reports that defendant e-mailed to UC1 and UC2, the first on November 2, 2011 (¶ 5.g.i), the second on November 10, 2011 (¶ 5.g.ii), and the third and longest report also on November 10, 2011 (¶ 5.h). Each of those reports, attached to three different e-mails, had a different filename, which filenames included Chinese characters. It was the second report defendant sent that first included references to 2PLA and QTC, which references remained in the third and longest report defendant sent.

3. On Exhibit 10, page 103, the metadata was included for the third and longest version of the Project A report that defendant e-mailed to UC1 and UC2 on November 10, 2011. That metadata showed a "Total editing time" of 00:00:01. This field, however, is not a reliable measure of the amount of time that a user spent editing a document. For instance, when a user opens a file, edits it for some period of time, and then uses the "Save As" function to save a document as a new file with a new filename, the "Total edited time" is reset and does not reflect the time spent editing the document before it was saved with a new name. See, e.g.,

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http://www.njd.uscourts.gov/sites/njd/files/EditMetaDataGuidePublic. pdf (last visited July 11, 2016); http://answers.microsoft.com/enus/office/forum/office_2010-word/matching-created-and-last-modifiedtimes-but-75/07927e13-4c54-4a2e-bf61-ac607aa8c3a0 (last visited July 11, 2016). When I have tested this on a computer by opening a Microsoft Word document editing it for some period of time, and then using "Save As" to save the file as a new document with a new name, the metadata for that new document reflects "Total editing time" of 00:00:00. This is only one of the ways that this metadata can be altered so that it does not reflect an accurate measurement of time spent editing a document. Based on my training and experience, and on my own testing of this feature, the "Total editing time" field will not increment or change when a document is only opened; rather, something in the document must change from the previous version for the "Total editing time" field to change.

4. Before defendant sent the e-mail attached as Exhibit 14 to my Initial Declaration on February 2, 2010, defendant had received from UC1 a total of thirteen e-mails from UC1 attaching a total of eight directory file listings related to the C-17.

5. On or about January 21, 2010, UC1, using email account sent an email to defendant with an archive attachment C-17_2.rar. Inside this archive file were at least four (4) .txt files which appear to be directory file listings of various servers.

a. One of these directory file listings inside C-17_2.rar was named "2.txt" and was approximately 321 pages long. In that list of files were at least ten (10) files with references to "testing" in their names, such as "100204 Inspection - Testing Results.ppt" and "LRU Testing Summary 2008.pdf."

b. Another directory file listing inside C-17_2.rar was named "3.txt" and was approximately 1,381 pages long. In that list of files were at least twenty-nine (29) files with references to "testing" in their names, such as "compatibility testing.doc" and "ERCC Thermal Testing."

6. As noted on page 27 of the complaint affidavit filed in this matter, on January 26, 2010, defendant sent UC1 a 1,467-page Microsoft Word document containing a directory file listing. In it, defendant highlighted in yellow a total of 146 files or folders, including at least nineteen (19) files with references to "test" or testing in their names, for example, "Compatibility Test Report .pdf" and "C-17 LOAD TESTINGRev.A.xls." This e-mail was sent after UC1 sent defendant an e-mail on January 21, 2010 asking for a document explaining which files were important, which ones were not important, and what the files were.

7. On or about July 9, 2014, the FBI made available to John Korstian, then an engineer at Lockheed Martin Aeronautics Company, a document written in English and interspersed with Chinese discussing the flight test plan of the F-35 fighter jet. The first page of this document is depicted on page 47 of the complaint affidavit filed in this matter. I obtained that document from an e-mail that defendant sent to UC1 on May 3, 2012.

8. On or about July 17, 2014, the FBI made available to Nick DeSimini, an Engineering Fellow at what was then Exelis (since acquired by Harris Corporation) five images of what appeared to be a presentation about an F-22 component (the AVEL). Those images stated they belonged to EDO. One of these images is shown redacted on page 43 of the complaint affidavit filed in this matter. I

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obtained those images from e-mails that UC1 sent to defendant on April 4, 2010.

9. On or about December 2, 2014, the FBI received a memorandum from the United States Department of State, Bureau of Political-Military Affairs Office, Office of Defense Trade Controls Compliance confirming that the Supplemental Flight Manual Mission Computer USAF TO 1C-17A-1-2 contains technical data covered by Category VIII(i) on the United States Munitions List.

10. Many of the Technical Orders ("TOS") related to the C-17 that I have reviewed in connection with this investigation contain a warning referring to Distribution Statement D, which states: "Distribution authorized to the Department of Defense and U.S. DoD contractors only for administrative and operational use, 16 November 1987. Other requests shall be referred to WR-ALC/564 ACSS-TOMA, Robins AFB, GA 31098-1607." I have been informed by personnel at Robins Air Force Base ("AFB") that this statement limits the disclosure of these technical orders, and any limited disclosure to other third parties would be coordinated through Robins AFB and would prevent them from being publicly available on the Internet.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge and belief. This declaration is executed at Los Angeles, California, on July , 2016.